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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 March 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6, 8-9, 11-17, 19-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

       * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Response to Arguments

Applicant's arguments filed 3/17/2009 have been fully considered but they are not

persuasive.

Applicant at first paragraph on page 7 of the remarks argues that Daily and Buxton do not

teach "the first graphical user interface part is *automatically* reoriented relative to the display in

accordance with a change to viewpoint orientation/location information of the display; and

allowing the second graphical user interface part to remain in a same orientation relative to the

display regardless of the change to the viewpoint orientation/location information of the display."

Examiner replies:

Examiner compares figures 3a and 3b of Buxton with figures 1 and 2 of the current invention

see below:
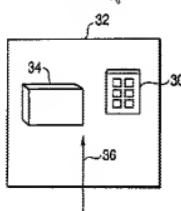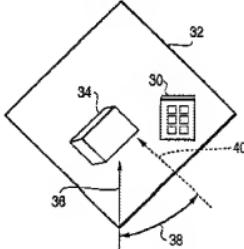
The model 34 turns with the display 32 while the interface element 30 remains aligned with the

normal viewing reference 36, see col. 4 lines 35-55. Examiner's interpretations: the interface

element 30 can be equated as a second graphical user interface, and element 34 can be equated

as a first graphical user interface since automatically reoriented relative to the display in

accordance with a change to viewpoint 36. Buxton at col. 4 line 28 discloses "a button type

menu 30 ..." that means the second user interface element comprises "a menu" as recited in

claims 8 and 19. Buxton in col. 5 line 9 teaches the element 34 in fig. 3a can be a model or art

work and Examiner interprets "art work" as it would have been obvious to one of ordinary skill

in the art to recognize an element of a user shell or an orient-less element as recited at last two

lines of claims 8, or an element that is not part of a user application as recited in claim 19.

Examiner's notes: The only difference between the figures of Buxton and the current invention

is the element 28 in figs. 1-2 of the current invention, which can be considered as another

graphical user interface. On top of that the current invention uses a sub-interface e.g., in fig. 7 #

120 that is not claimed as a claim limitation.

Applicant on page 7 at second paragraph argues that Daily do not reorient, or rotate

relative to the change in viewpoint, rather a different portion of the frame buffer is brought in

view as the user moves his head. Because the Office Action admitted that Buxton does not

disclose this feature, Daily and Buxton, even in combination, do not teach all recited features

present in claim 1. Thus claim t patentably distinguishes over Daily and Buxton.

Examiner's replies: Firstly the Office action did not admit that Buxton does not disclose

rotate relative to the change in viewpoint, see figures 3a and 3b above. Secondly, Daily teaches

the first graphical user interface part (i.e. the image data viewing) is automatically reoriented

relative to the display in accordance with a change to orientation/location information (i.e. noted

in col. 4 lines 43-51) that a user controlled input position sensor 24 (i.e. the reference point of the

user with respect to the display are) is coupled to workstation 12 and would preferably be a head

coupled low latency head tracking position sensor 26 worn on the user's head as part of the head

mounted display and having six degrees of freedom of movement (i.e., x, y, z, roll, pitch and yaw

axes), said tracking sensor 24 is adapted for generating position control signal as an input to

computer 12 to selectively change the selected viewing (i.e. similar to the first graphical user

interface part) location based upon movement of the user's head. As Daily teaches in col. 2 lines

58-59 that view of data can be represented 3-D in the form of left and right eye views to the user.

Examiner response to Applicant's arguments regarding a different portion of the frame

buffer is brought in view as the user moves his head of Daily, the claimed invention do not

explicitly specify where the user graphical interfaces data are stored.

In response to applicant's arguments against the references individually, one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references.

Examiner believes the claimed invention does not clearly point out the patentable novelty

which Applicant's representative thinks the claims present in view of previous interview with

Applicant's representative, reminding: e.g., an image of a graphical object with respect to view

points of a viewer, see the examiner's notes above.

Examiner cited newly found prior arts for Applicant considerations see below and form

892.

The previous rejection of claims 1-6, 8-9, 11-17, 19-24 are still maintained.

Prior art

Newly found prior art US 7184037 B2 Gallery et al. provide a user operable means for

browsing data defining a virtual environment and rendering a view of the same, including the

generation of a visual aid to assist user navigation of the environment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-6, 8-9, 11-17, 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Buxton et al. 6,115,025, hereinafter refer as Buxton, and in view of Daily et al. US

6,198462 B1 hereinafter Daily.

1.   Claim 1,

As per claim 1, "A graphical user interface displayed on a display and comprising a first

graphical user interface part and a second graphical user interface part, the method

comprising:", Buxton in figs. 3a and 3b clearly illustrates two parts 34 and 30. Buxton teaches

the first graphical user interface part is automatically reoriented relative to the display in

accordance with a change to **viewpoint** (i.e. noted similar to reference 36 shown in fig. 3a)

orientation/location information of the display; and allowing the second graphical user (i.e.

noted in col. 4 lines 38-39 element 30) interface part to remain in a same orientation relative to

the display (i.e. noted display 32) regardless of the change to the **viewpoint** orientation/location information of the display.

Buxton is silenced specifying explicitly a graphical user interface that includes first, and second interface elements, with changeable viewpoint. However, it would have been obvious to one of ordinary skill in the art to recognize that the second graphical user can be considered as Buxton teaches in col. 4 lines 38-39 element 30, and the first graphical interface can be considered as element 34 in fig. 3a.

However, the second reference Daily teaches the first graphical user interface part (i.e. the image data viewing) is automatically reoriented relative to the display in accordance with a change to orientation/location information (i.e. noted in col. 4 lines 43-51) that a user controlled input position sensor 24 (i.e. the reference point of the user with respect to the display are) is coupled to workstation 12 and would preferably be a head coupled low latency head tracking position sensor 26 worn on the user's head as part of the head mounted display and having six degrees of freedom of movement (i.e., x, y, z, roll, pitch and yaw axes), said tracking sensor 24 is adapted for generating position control signal as an input to computer 12 to selectively change the selected viewing (i.e. similar to the first graphical user interface part) location based upon movement of the user's head. As Daily teaches in col. 2 lines 58-59 that view of data can be represented 3-D in the form of left and right eye views to the user.

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Daily teachings into Buxton's teachings, in order to minimize latency head tracking position sensor and user interfacing with data using the head tracker. On top of that the first

graphical user interface can be achieved by Daily teachings that may be incorporate it with

Buxton teachings of the second graphical user interface.

2.   Claim 2,

A method according to claim 2, wherein the first part is a first user interface element and

the second part is a second user interface element. Buxton at col. 4, line 30 teaches the claim

limitations.

3.   Claim 3,

A method according to claim 2, wherein a user explicitly determines the change to the

orientation/location information. Buxton in fig. 6 step 86 teaches the claim limitation.

4.   Claim 4,

A method according to claim 3, wherein the explicit determination comprises the user

interactively inputting information that indicates an orientation. Buxton in fig. 6 step 86 teaches

the claim limitation.

5.   Claim 5,

A method according to claim 2, wherein the change to the orientation/location

information is determined automatically based on a spatial orientation/location change relative to

the display. The rejection of this claim is similar to the rejection of claim 1.

6.   Claim 6,

A method according to claim 5, wherein the automatic determination comprises at least

one of sensing the orientation of an input device, sensing the orientation/location of a user,

automatically identifying an identify of a user. Buxton in fig. 6 step 88, and in fig. 7 steps 112,

120 teaches the claim limitations.

7.   Claims 8-9, 11-12,

Regarding claim 8, the combination of the two references teach the claimed limitations, and claim 8 is rejected with similar reason as set forth in claim 1, above. In view of following claims' limitations, it is not necessary to repeat, the rejection of claims 1-6 that applies to rejection of claims 8-9, 11-12.

8.   Claims 13-17, 20-24,

Claim 13 is rejected with similar reason as set forth in claim 1, above. The rejection of claims 1-6 applies to rejection of claims 14-17, 20-24.

9.   Regarding claim 19, the combination of the two references teaches the claimed limitations, and claim 19 is rejected with similar reason as set forth in claim 1, above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAVID A. AMINI whose telephone number is (571)272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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